

STN - TECHNICAL FILES

(FILE 'HOME' ENTERED AT 12:00:53 ON 04 MAY 2001)

FILE 'COMPUAB, COMPUSCIENCE, ELCOM, INFODATA, SOLIDSTATE, CONF' ENTERED  
AT 12:01:11 ON 04 MAY 2001

L1 4757 SEA VOCODER OR VODER OR (VOICE? OR SPEECH) (3A) (SYNTHE? OR  
RESYNTH? OR CODE# OR CODING OR ENCOD? OR DECOD?) OR (SOUND? OR  
VERBAL OR VOCAL? OR SING? OR WORD#) (3A) (SYNTH? OR RESYNTH?)  
L2 108752 SEA VECTOR? OR DSP OR DSPS OR SIGNAL###(1A) PROCESS? OR  
MATRIX? OR MATRICES OR ARRAY#(2N) PROCESS?  
L3 31480 SEA SCALAR? OR PROTOCOL?  
L4 34292 SEA MULTIPROCESS? OR (MULTI OR MULTIPLE OR MANY OR SEVERAL OR  
PLURAL? OR NUMEROUS OR MORE(1W) ONE OR THREE) (5A) (PROCESS? OR  
MICROPROCESS?)  
L5 1771 SEA (CELL OR CELLULAR OR MOBILE OR PORTABLE OR WIRELESS OR  
CORDLESS OR HANDHELD OR HAND HELD OR RADIO OR WITHOUT(2W) (CORD#  
OR WIRE OR WIRES)) (5W) (TELEPHONE? OR PHONE?) OR RADIOPHONE?  
OR RADIOTELEPHONE?  
L6 0 SEA L1 AND L2 AND L3 AND L4 AND L5  
L7 3 SEA L4 AND L5 AND (L1 OR L2 OR L3)  
L8 3 DUPLICATE REMOVE L7 (0 DUPLICATES REMOVED)  
D L8 BIB,ABS 1-3  
L9 1 SEA (GHAUVEL, G? OR GHAUVEL G? OR AUSSEDAT, F? OR AUSSEDAT F?  
OR CALIPPE, P? OR CALIPPE P?)/AU  
D L9 BIB  
L10 621 SEA TEXAS INSTRUMENT?  
L11 0 SEA (L10 OR L9) AND ((L4 AND L5) OR PROTOCOL(2W) PROCESS?)

FILE HOME

FILE COMPUAB

FILE COVERS 1981 TO 12 Apr 2001 (20010412/ED)

FILE COMPUSCIENCE

FILE LAST UPDATED: 26 APR 2001 <20010426/UP>

FILE COVERS 1972 TO DATE.

FILE ELCOM

FILE COVERS 1981 TO 12 Apr 2001 (20010412/ED)

FILE INFODATA

FILE LAST UPDATED: 02 MAY 2001 <20010502/UP>

FILE COVERS 1976 TO DATE.

FILE SOLIDSTATE

FILE COVERS 1981 TO 12 Apr 2001 (20010412/ED)

FILE CONF

FILE LAST UPDATED: 27 APR 2001 <20010427/UP>

FILE COVERS 1976 TO DATE.

L8 ANSWER 1 OF 3 ELCOM COPYRIGHT 2001 CSA  
AN 2001:1536 ELCOM  
TI RISC + SIMD identical with **DSP**?  
ICASSP IEEE INT CONF ACOUST SPEECH **SIGNAL PROCESS** PROC  
AU Shi, Hao  
CS Infineon Technologies, San Jose, CA, USA  
SO (200000000) vol. 6, pp. 3211-3214. IEEE. PISCATAWAY, NJ, (USA).  
Meeting Info.: 2000 IEEE International Conference on Acoustics, Speech,  
and Signal Processing. Istanbul, Turkey. 06/05/2000-06/09/2000.  
DT Book  
TC Conference  
FS E  
LA English  
AB The adoptions of RISC (Reduced Instruction Set Computer) and SIMD (Single  
Instruction **Multiple** Data) architectures in **processor**  
design have been proven great successes in boosting processor performance.  
System designers and processor architects are now asking if the  
combination of both can produce a unified Digital **Signal**  
**Processor** (DSP)/Micro-controller (MC) for  
system-on-a-chip design. The unified processor is particularly suited for  
cost reduction of **handheld** systems such as **cellular**  
**phone** and speech interface applications. This paper will discuss  
various aspects that contribute to the answer of this question as well as  
the top-level design tradeoffs.

L8 ANSWER 2 OF 3 SOLIDSTATE COPYRIGHT 2001 CSA  
AN 94:877 SOLIDSTATE  
TI High-frequency BiCMOS process and its application to frequency  
synthesizers.  
AU Takei, Nobuyuki; Onozawa, Kazunori  
CS Semiconductor & Integrated Circuits Div Hitachi Ltd, Jpn  
SO HITACHI REV., (1993) vol. 42, no. 3, pp. 125-128.  
ISSN: 0018-277X.  
DT Journal  
FS S  
LA English  
AB Recently, the mobile communications applications area, especially in  
regard to **portable** and automotive **telephones**, has  
grown rapidly. These applications were made possible by the advances in  
semiconductor technology which have enabled increased integration and  
speed, at the same time reducing power dissipation and the voltage of  
operation. Given this background, we have developed the 0.7-  $\mu$  m BiCMOS  
(bipolar complementary MOS) process that is appropriate for high frequency  
**signal processing**. In developing a single chip PLL  
(phase-locked loop) synthesizer for analog cellular use utilizing this  
**process**, we benefited from **several** technologies to  
increase the speed and reduce the power dissipation at both the device and  
system levels. We intend to continue developing these technologies to  
their maximum potential to develop IC products that meet users' needs.

L8 ANSWER 3 OF 3 ELCOM COPYRIGHT 2001 CSA  
AN 83:7424 ELCOM  
TI Intermodulation in amplitude companded sideband systems.  
AU Nosedal, F.M.  
CS Stanford Univ., Stanford, CA, USA  
SO DISS. ABST. INT. PT. B - SCI. & ENG., (1983) 223 pp. Order No. FAD  
DA8301253..  
DT Book  
TC Dissertation  
FS E  
LA English

SL English

AB The current congestion of the radio spectrum calls for new techniques that make more efficient use of this valuable resource. Amplitude Companded Sideband (ACSB) modulation for voice communication provides a means to improve the spectrum utilization since it requires a transmission bandwidth much smaller than the current schemes while rendering a comparable performance. In ACSB speech signals undergo **several** forms of audio **processing** and are, subsequently, single-sideband (SSB) modulated. The resulting signal is highly immune to noise. The main applications of ACSB can be found in **mobile radio**, **radio-telephone**, and satellite communication systems.